Dart Aerospace Ltd. plut 07/01/19 Wednesday, 11/22/2006 1:40:01 PM Date. Kim Johnston User: **Process Sheet** : BEARING ASSEMBLY **Drawing Name** : CU-DAR001 Dart Helicopters Services Customer Job Number : 29651 : 10716 **Estimate Number** :NA Part Number : D3121241 P.O. Number S.O. No. : NA : D3121 REV D **Drawing Number** : 11/22/2006 This Issue : N/A Project Number Prsht Rev. 14 : MA : MACHINED PARTS **Drawing Revision** Type First Issue : NIA : 27433 Material Previous Run Each Due Date : 11/29/2006 Um: Written By Checked & Approved By New issue KJ/DS : Est Rev:A 04.02.18 Comment Additional Product Job Number: Description: Machine Or Operation: Seq. #: MDELRINR12500 DELRIN ROUND BAR 1.25" 1.0 0.0546 f(s)/Unit Total: 1.0920 f(s) Comment: Qty.: Material: Ø1.25 Delrin Rod (M-DELRIN-R1.2500)Identify as D3121-25 HARDINGE CNC LATHE SMALL 2.0 Comment: HARDINGE CNC LATHE SMALL 1-Turn D3121-25 Cap as per Folio FA387 2-Deburr 3.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE Comment: INSPECT PARTS AS THEY COME OFF MACHINE SECOND CHECK 4.0 Comment: SECOND CHECK 5.0 D312123 Bearing

Qty Part Number

1 D3121-23

Total: 20.0000 Each(s)

Comment: Qty.: 1.0000 Each(s)/Unit Pick:

> Batch Description Bearing

B30241 X8

Dart	Aero	space	Ltd
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W/O:		WORK ORDER CHANGES								
DATE STEP		PROCEDURE CHANGE By	Date	ate Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
		÷ -								

Part No:	PAR #:	Fault Category:	NCR: Yes No	DQA:	Date: 07/01/6
			QA: N/C	Closed:	Date:

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
		Description of NC		Corrective Action Section B		Verification	Annroval	Aumanual
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector

NOTE: Date & initial all entries

Wednesday, 11/22/2006 1:40:01 PM Kim Johnston User: **Process Sheet** Drawing Name: BEARING ASSEMBLY Customer: CU-DAR001 Dart Helicopters Services Part Number: D3121241 Job Number: 29651 Job Number: Description: Seq. #: Machine Or Operation: SMALL & MEDIUM FAB RESOURCE 1 SMALL FAB 1 Comment: SMALL & MEDIUM FAB RESOURCE 1 67/01/24 1-Press D3121-23 Bearing into D3121-25 Cap as per Dwg D3121 INSPECT WORK TO CURRENT STEP QC5 7.0 Comment: INSPECT WORK TO CURRENT STEP 14 07.01.24 PACKAGING RESOURCE #1 PACKAGING 1 8.0 Comment: PACKAGING RESOURCE #1 Identify and Stock Location: FINAL INSPECTION/W/O RELEASE QC21 9.0 Comment: FINAL INSPECTION/W/O RELEASE C201101124 Job Completion

Page 2

Dart Ae	rospace	Ltd								
W/O:			W	ORK ORDER CH	ANGES					
DATE	STEP	PRO	OCEDURE CHA	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	gory:	NC				_ Date: _	
NCR:		,	WORK ORD	ER NON-CONFO	ORMANCE					
DATE	STEP	Description of NC Section A				Sign &	Verification Section C		Approval Chief Eng	Approval QC Inspector
				Somo: Eng		Duto				

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	29651
Description: Cap	Part Number:	D3121-25
Inspection Dwg: D3121 Rev: D		Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

Х	First Article	Prototype
2.0		

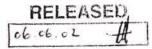
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.315	+/-0.010	.312	_			
Ø1.000	+/-0.010	1.001				
Ø0.838	+/-0.002	.837				
R0.063	+/-0.010	.063				
R0.010	+/-0.010	Axe 011				
0.230	+/-0.001	230	-			
Ø0.865	+/-0.001	.864	/			
					7.	

Measured by:	Audited by:	Er	Prototype Approval:	N/A
Date: 66/11/27	Date:	06/11/27	Date:	N/A

Rev	Date	Change		Revised by	Approved
Α	04.04.20	New Issue	(P/O D3121-241)	KJ/RF 1.0	-1
В	06.06.09	Ø1.000 diamete	er was Ø1.024	KJ/JLM A	Sul



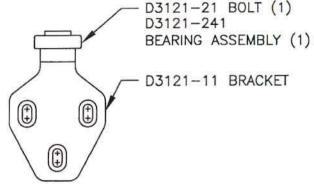
DESIGN	DRAWN BY CB	DART AEROSF HAWKESBURY, ONTAF	
CHECKED	APPROVED A	DRAWING NO.	REV. D
I 1	AN H	D3121	SHEET 1 OF 10
DATE	m11	TITLE	SCALE
06.05.1	7	BRACKET ASSEMBLY	1:2
Α	02.04.15	NEW ISSUE	
В	03.01.16	ADD RIDGES; ADD MAT' ADD -141/-143/-144	L PROP; FIX P/N 4/-145/-146
С	04.02.17	ADD CLEARANCE; USE	-241 BEARING
D	06.05.17	D3121-25 CAP WAS 1	.024, NOW 1.000



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## D3121-041 BRACKET ASSEMBLY

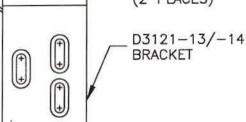
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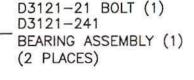




## D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY

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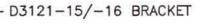




#### D3121-045 (SHOWN) / D3121-046 (OPPOSITE) BRACKET ASSEMBLY

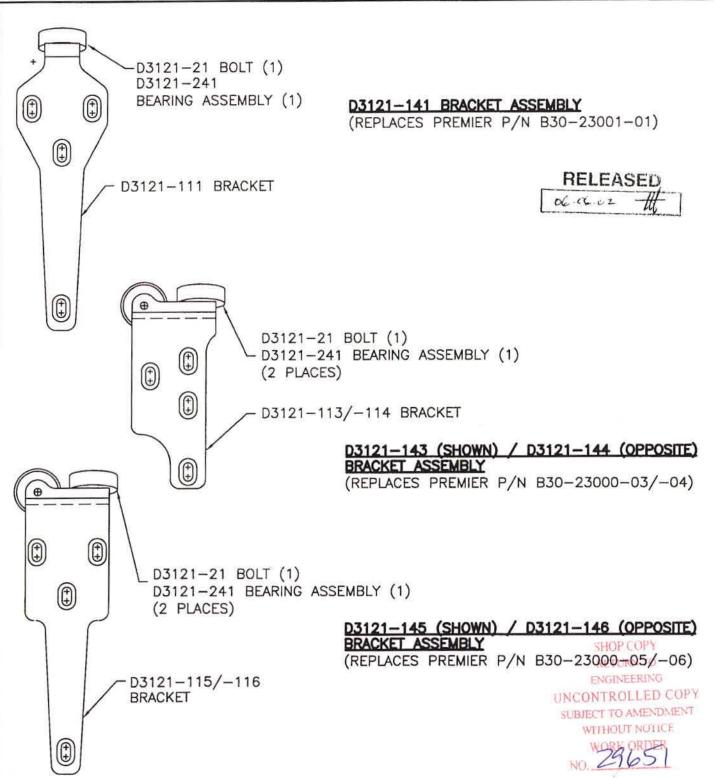
(REPLACES PREMIER P/N B30-23000-35/-36)

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V A	h H	D3121	SHEET 2 OF 10
DATE		TITLE	SCALE
06.05.17		BRACKET ASSEME	BLY 1:2

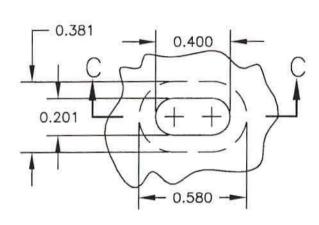


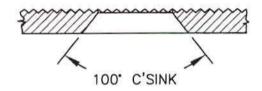
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I VA	h ##	D3121	SHEET 3 OF 10
DATE		TITLE	SCALE
06.05.17		BRACKET ASSEMBLY	1:1

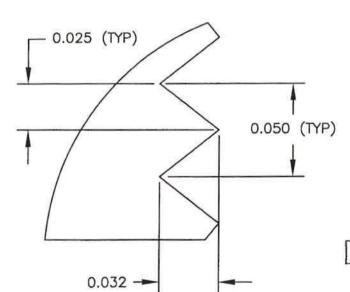
DETAIL A: SLOT DETAIL SCALE 2:1 VIEW ROTATED





SECTION C-C

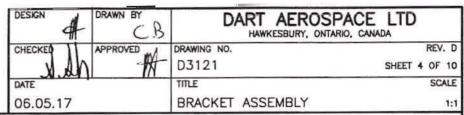
DETAIL B: RIDGE DETAIL PARTIAL SECTION SCALE 1:20

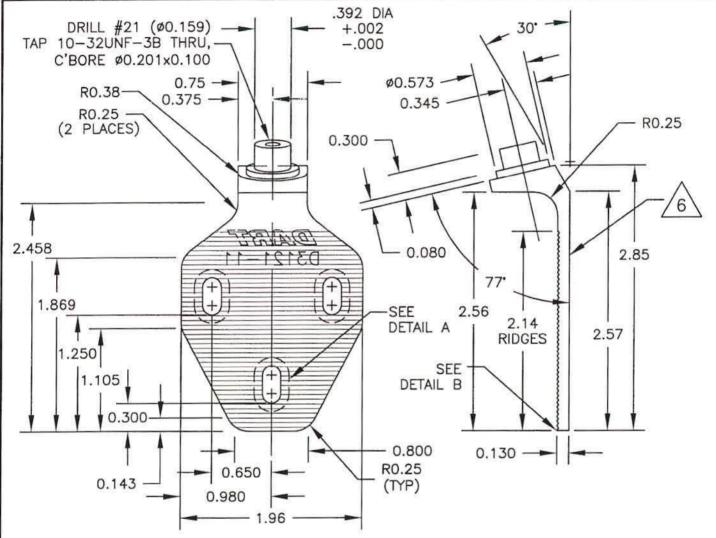


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D3121-11 BRACKET

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi

MIN YIELD TENSILE = 100 ksi

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

4) BREAK ALL SHARP EDGES 0.005 TO 0.015

5) ENGRAVE DART P/N & LOGO AS SHOWN

6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

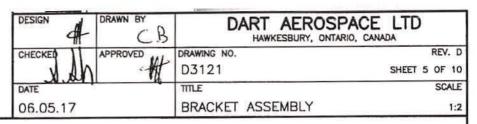
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WITHOUT NOTICE

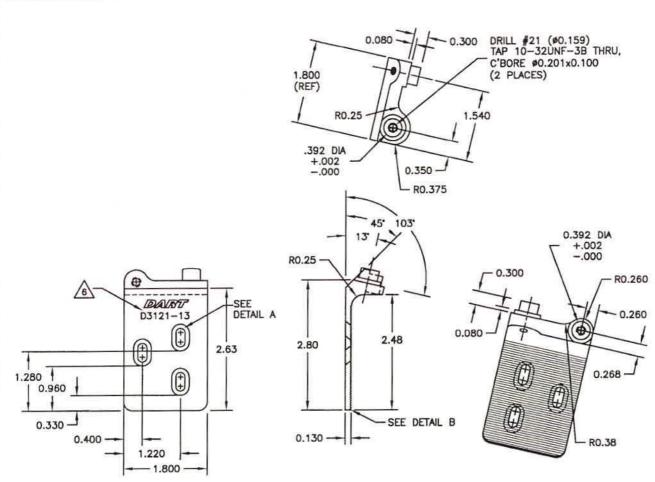
NO. 29651

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D3121-13 BRACKET (SHOWN)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) CONTROLLED COPY
MIN ULTIMATE TENSILE STRENGTH - 150 Inc. MIN YIELD TENSILE STRENGTH = 100 ksi

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

4) BREAK ALL SHARP EDGES 0.005 TO 0.015

5) ENGRAVE DART P/N & LOGO AS SHOWN

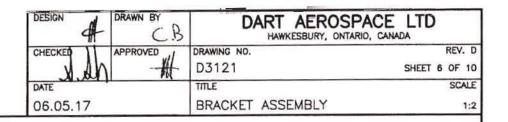
6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

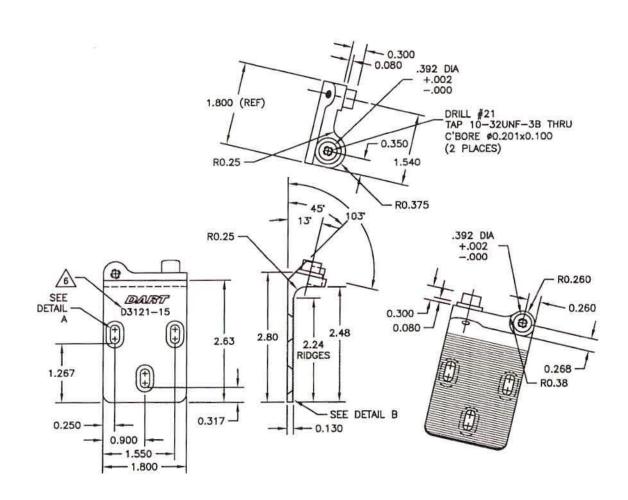
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## D3121-15 BRACKET (SHOWN) D3121-16 BRACKET (OPPOSITE)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) UNCONTROLLED COPY MIN ULTIMATE TENSILE = 150 ksi MIN YIELD TENSILE = 100 ksi

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

4) BREAK ALL SHARP EDGES 0.005 TO 0.015

5) ENGRAVE DART P/N AND LOGO AS SHOWN

6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

SHOP COPY RETURN TO ENGINEERING

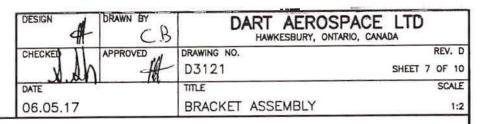
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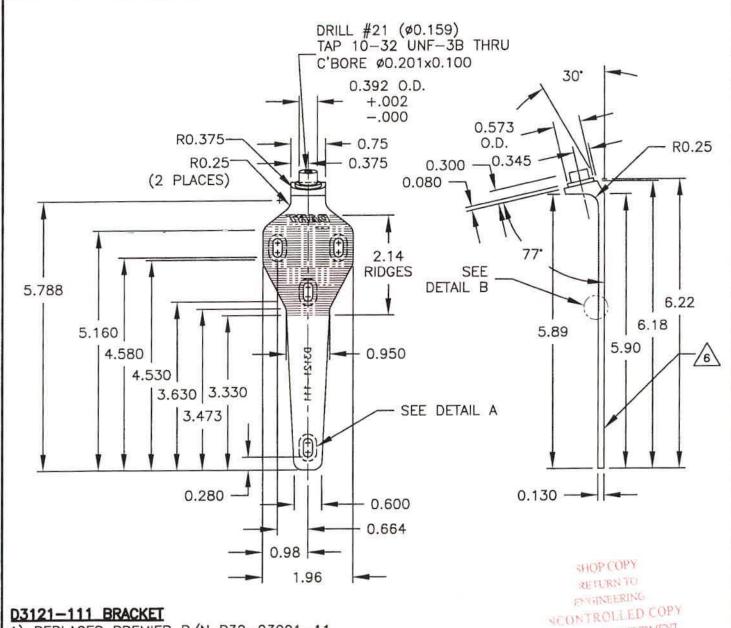
WITHOUT NOTICE

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D3121-111 BRACKET

1) REPLACES PREMIER P/N B32-23001-11

BIECT TO AMENDMENT 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) WITHOUT NOTICE MIN ULTIMATE TENSILE = 150 ksi

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHEWISE NOTED

MIN YIELD TENSILE = 100 ksi

4) ALL DIMENSIONS ARE IN INCHES

5) BREAK ALL SHARP EDGES 0.005 TO 0.015

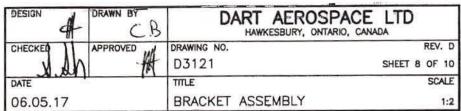
6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN

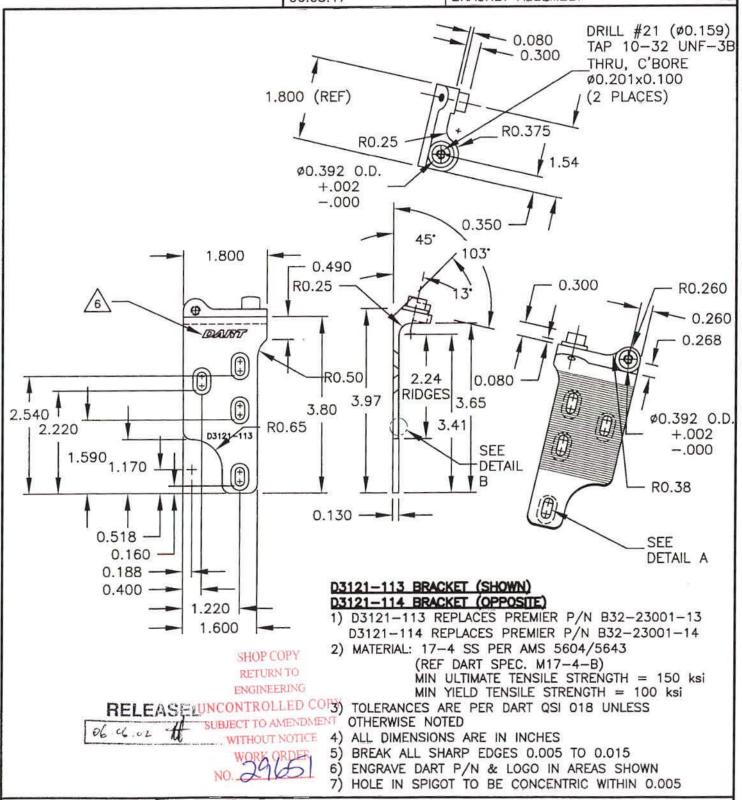
7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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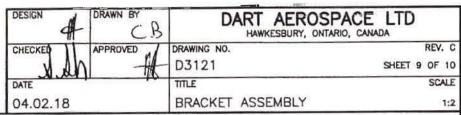


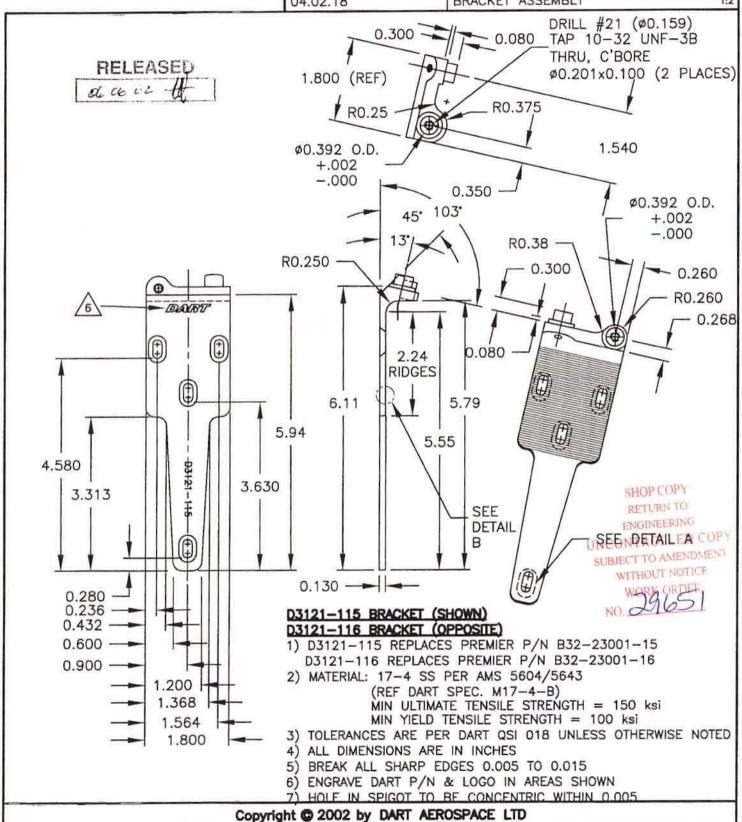




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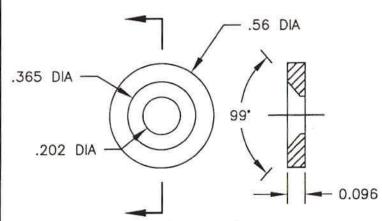






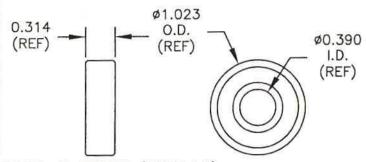


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V A	h #	D3121	SHEET 10 OF 10
DATE		TITLE	SCALE
06.05.17		BRACKET ASSEMBLY	1:1





- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



#### D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



D3121-23 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ
- 2) ALL DIMENSIONS ARE IN INCHES

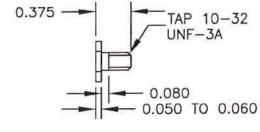
D3121-25 CAP (SCALE 1:1)

YEM 1) MATERIAL: DELRIN ROD, Ø1.25

(REF DART SPEC. M-DELRIN-R1.250)

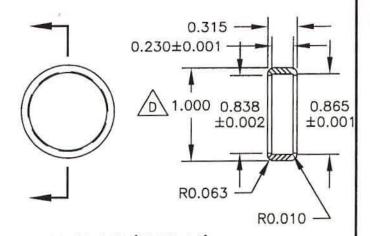
2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

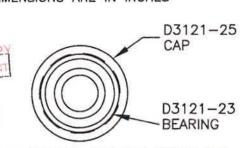
3) ALL DIMENSIONS ARE IN INCHES





- MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015





D3121-241 BEARING ASSEBLY (SCALE 1:1)

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